

## ABSTRACT OF THE DISCLOSURE

To provide a high voltage treatment equipment in which even if a voltage applied between a pair of electrodes is lowered to not more than a predetermined value, field strength is produced between the pair of electrodes, a discharge having a wide spread is formed and liquid can be reformed with high efficiency, and economically advantageously.

A liquid treatment equipment comprising at least a pair of electrodes, wherein at least one electrode is arranged so as to be dipped into liquid, and a pulsed power is applied between the pair of electrodes to form a discharge state between the electrodes to thereby reform liquid present between the electrodes, wherein a region having field strength raised to a value not smaller than 500 kV/cm is present in the vicinity of the electrode dipped into the liquid. To this end, the electrode dipped into the liquid is in the form of a rod, whose diameter is not more than 1 mm  $\phi$ .

Further, operation is carried out, while moving at least one electrode out of a set of a pair of electrodes, by changing a discharge generation part on the moving electrode.

Furthermore, a liquid treatment equipment wherein a treated liquid is supplied into a pipeline continuously or intermittently, and a discharge state is formed between a ring-like or tubular electrode arranged coaxially with the inner peripheral surface of the pipeline and a linear electrode arranged along the axial center of the pipeline to reform the treated liquid within the pipeline, wherein the ring-like or tubular electrode is embedded in the pipeline wall leaving the inner surface of the electrode.